REMARKS

This responds to the Office Action dated August 25, 2005, and the references cited therewith.

Claims 1, 3, and 12-14 are amended herein. Claims 1-20 are now pending in this application.

§102 and §103 Rejection of the Claims

Claims 1-20 were rejected under 35 U.S.C. § 102(b) as being anticipated by Hartley et al. (U.S. Patent No. 6,161,042). Claims 1 and 13 were rejected under 35 U.S.C. § 102(b) as being anticipated by Mouchawar (U.S. Patent No. 6,445,951). Claims 4, 6, 7 and 17-19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Mouchawar (U.S. Patent No. 6,445,951) in view of Nappholz et al. (U.S. Patent No. 5,817,136). The rejections are traversed and reconsideration is respectfully requested. Applicant has amended the claims herein in a manner believed to render the claims patentable over the references of record but reserves the right to prosecute claims similar or identical to the original claims in this or a later-filed continuation.

Claims 1 and 12 have been amended to recite, among other things, a switch matrix with the capability of switching between different electrode configurations for use as voltage sense electrodes, circuitry for detecting noise when no excitation current is supplied and for computing an average noise level, circuitry for operating the switch matrix to select a configuration of voltage sense electrodes for use by the device that result in the lowest average noise level. Claim 13 has been amended to recite, among other things, selecting a configuration of voltage sense electrodes for use by the device among a plurality of available configurations, wherein the plurality includes at least a first voltage sense electrode configuration and a second voltage sense electrode configuration, by: 1) for each of the first and second voltage sense electrode configurations, detecting noise in the voltage sense signal while no excitation current is supplied and computing an average noise level; and, 2) as between the first and second voltage sense electrode configurations, selecting the configuration of voltage sense electrodes that results in the lowest average noise level. Applicant finds no teaching or suggestion for these elements in

either the Hartley or Mouchawar reference. In particular, neither reference discusses a switch matrix or other means for selecting between multiple configurations of voltage sense electrodes or excitation current electrodes, detecting noise in the voltage sense signal while no excitation current is supplied and computing an average noise level for at least two electrode configurations, or circuitry for operating the switch matrix to select a configuration of electrodes for use by the device that result in the lowest average noise level. Also, contrary to what is asserted in the office action, the Mouchawar reference does not appear to describe any type of noise detection operation in which a voltage sense signal is generated while no excitation current is supplied.

For the reasons set forth above, independent claims 1, 12, and 13 are respectfully submitted to be patentable over the references of record. Dependent claims 2-11 and 14-20 recite additional limitations to the subject matters recited by either claim 1 or 13, which limitations are asserted to be neither taught nor suggested by the prior art in that context. Applicant also wishes make the following specific points. With respect to the rejections of claims 2 and 14, applicant finds no teaching or suggestion in the Hartley reference of computing an average signal level from the voltage sense electrodes and selecting a configuration of voltage sense electrodes for use by the device that result in the highest signal-to-noise ratio. Regarding the rejections of claims 3 and 15, applicant finds no teaching or suggestion in the Hartley reference of selecting a configuration of both voltage sense and excitation current electrodes for use by the device that result in the highest signal-to-noise ratio. With respect to the rejections of claim 11, applicant finds no teaching or suggestion in the Hartley reference for the voltage sense signal signals being filtered into the ventilation band in order to detect a noise level during a noise detection operation.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (847) 432-7302 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

SCOTT FREEBERG

By his Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(847) 432-7302

Date 11-23-05

By _____
J. Kevin Parker
Reg. No. 33,024

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 23 day of November, 2005.

Paula Sucha
Name

Paula Sucha
Signature